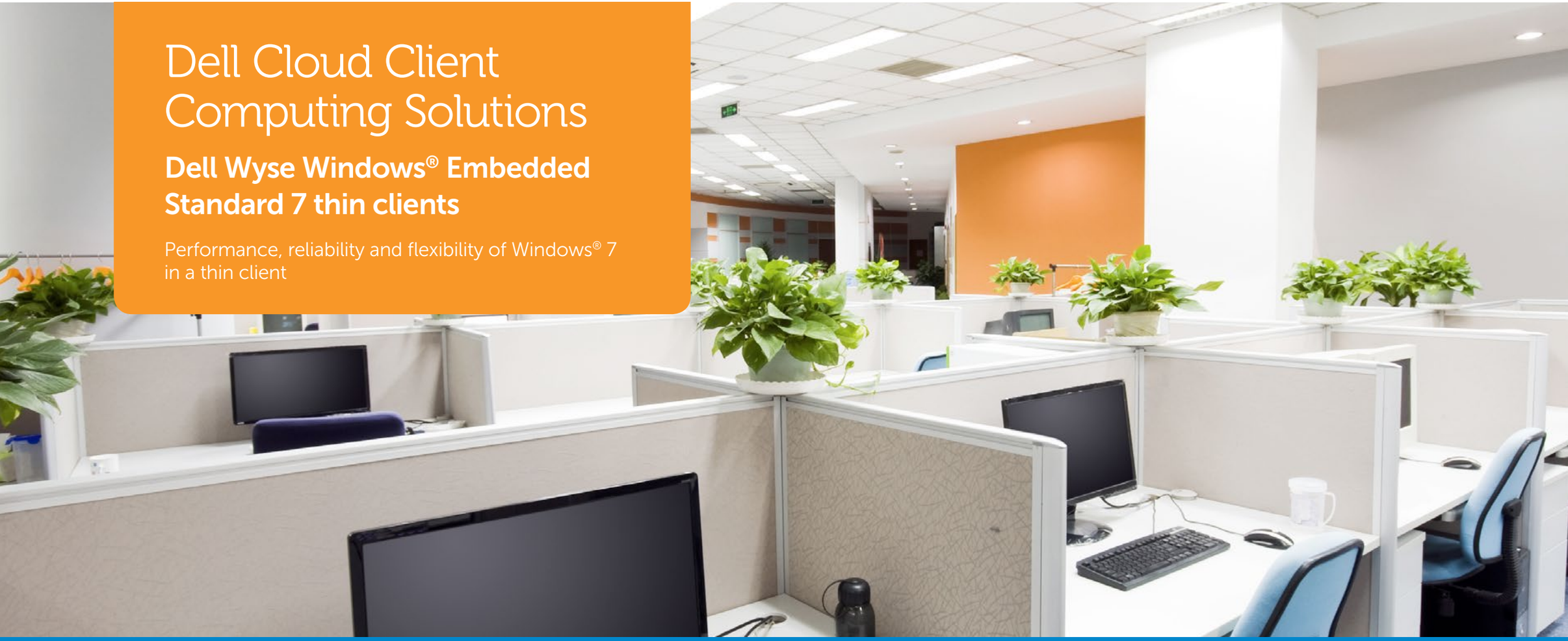
Dell Cloud Client Computing Solutions

Dell Wyse Windows® Embedded Standard 7 thin clients

Performance, reliability and flexibility of Windows® 7 in a thin client



Learn more here:

Introducing Windows® Embedded Standard 7 thin clients

Power and flexibility of Windows® 7 in a thin client

For virtual desktops end users and IT will love

Combine the performance, reliability and flexibility of Windows® Embedded Standard 7 with the security, ease of management, and cost-savings of powerful Dell Wyse thin clients.

Windows® Embedded Standard 7 is better with Dell Wyse thin clients:

Secure from the desktop to the data center

- Dell Wyse thin clients are far more secure than PCs with an extremely small attack surface
- Can be locked down as single purpose endpoints
- Support a wide range of user authentication methods
- Apps and content are protected in the data center

Great to use

Dell Wyse thin clients deliver a fast, rich, familiar Windows® 7 user experience:

- Windows® 7 user interface for VDI, local internet, and local apps
- Connectivity to a broad range of Windows® applications and peripherals
- Power to drive rich, fluid graphics locally or via VDI protocols: Microsoft® RemoteFX, Citrix® HDX

Highly scalable and easy to manage

Management software that scales as you grow from just a few to tens of thousands of thin clients:

- Dell Wyse Device Manager – easy, remote management and monitoring; no need to ever visit endpoints
- Dell Wyse Configuration Manager – automatic, server-less configuration management
- Manage with your existing Microsoft® System Center Configuration Manager 2012 SP1

Dell Wyse thin clients

Dell Wyse offers a variety of hardware form factors with single, dual or quad core options to suit your budget, application, and performance needs. Click the images to learn more.

Dell Wyse C class

Highly capable and affordable

Dell Wyse D class

Powerful and compact

Dell Wyse Z class

When performance and versatility matter

Dell Wyse X class

Mobility & Performance

Dell Wyse software can further enhance the Windows Embedded Standard 7 user experience.

Learn more.

Quick compare

Specifications

Quick compare Hardware platforms

Single, dual, and quad core platforms, including mobile thin clients address a wide range of budget, application, and performance needs.

Dell Wyse C class

Highly capable
For task and office workers' everyday use, yet highly cost effective

Dell Wyse D class

Powerful & compact
For knowledge workers and power users with demanding virtual desktop applications. Great for kiosks and digital signage

Dell Wyse Z class

When performance & versatility matter
For power users who demand the best performance and connectivity with a wide range of peripherals

Dell Wyse X class

Mobility & performance
For mobile workers - anywhere access to apps and corporate resources in two hardware form factors

Dell Wyse C class thin client Features

Task-specific affordable performance

The C90LE7 is a highly capable and affordable thin client for task workers who consume and edit content and who need word processing and internet access. The VIA Eden 1GHz processor offers excellent performance at a cost-effective price.

The C90LE7's small size enables discrete mounting options: under desks, to walls, and behind monitors. Operating with fewer than 7 watts of electricity, the C90LE7's energy efficient performance and cool, quiet operation can reduce costs and environmental impacts.

Don't forget the monitor!

Only Dell monitors are tested and verified to work with Dell Wyse clients. Click here to see which award winning Dell monitors are compatible with this client.

Wi-fi antenna connector for optional 802.11 wireless
DVI-I video output
Two PS/2 ports for keyboard and mouse
Kensington lock slot (Lock and cable sold separately)
Gigabit ethernet port
Four available external USB 2.0 ports (2 front; 2 back)

Product page

Specifications

Dell Wyse D class thin clients Features

When performance really matters

Offering a choice of a dual or quad core AMD APU in a compact chassis, the D class provides a fast, rich Windows Embedded Standard 7 experience for demanding knowledge workers and power users. With its extremely compact size and high performance, it's great as a VDI endpoint, and for digital signage and kiosks.

Consuming as little as 9 watts of energy, the D class offers cool, quiet operations and contributes to reducing your overall carbon footprint.

D90D7

The dual core D90D7 handles knowledge workers' demanding Windows® virtual desktops and cloud applications, including rich content creation and consumption, HD video, unified communications, and 3D graphics.

Digital signs and kiosk displays for a wide variety of industries – i.e. manufacturing, hospitality, retail, and healthcare – look great on a thin client that is Microsoft RemoteFX®, Citrix® HDX, VMware PCoIP, and HD video enabled.

D90Q7

The D90Q7 delivers super-fast performance for those power users who need even higher-end graphics or advanced graphics intensive applications, such as computer aided design, 3D modeling, and multi-stream HD video.

Don't forget the monitor!

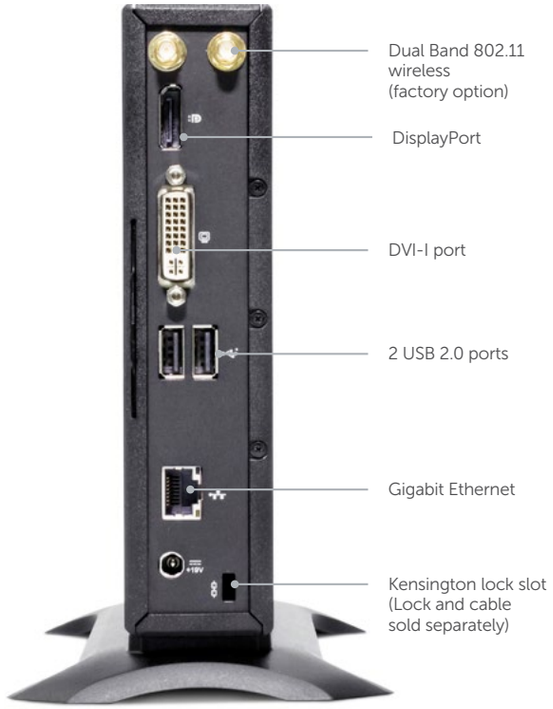
Only Dell monitors are tested and verified to work with Dell Wyse clients. Click here to see which award winning Dell monitors are compatible with this client.

See connectivity here.

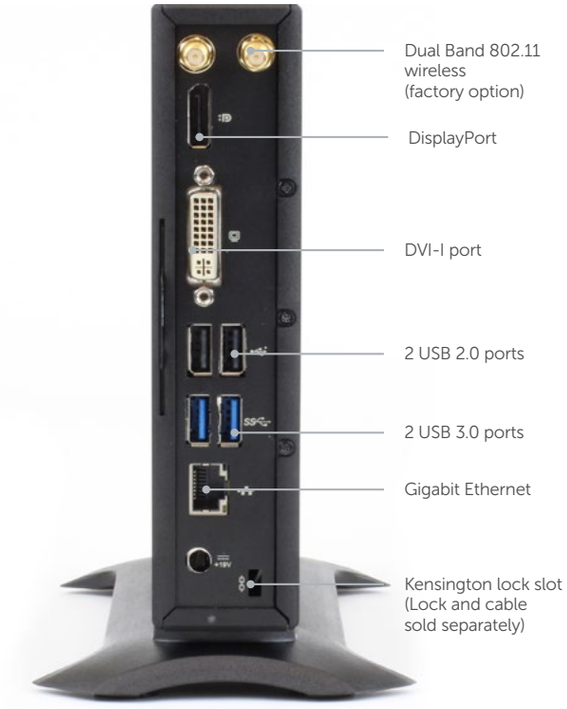
Product page

Specifications

Dell Wyse D class thin clients Connectivity



Rear view D90D7



Rear view D90Q7

Product page

Specifications

Dell Wyse Z class thin clients Features

Ultra high performance, versatile connectivity

With so much power and so many familiar peripherals at their fingertips, the most demanding knowledge workers and power users will love the Dell Wyse Z class. Z class offers single, dual, and quad core AMD CPUs with integrated graphics engines with the broadest range of fast, flexible connectivity options. Users will enjoy using their favorite legacy and cutting edge peripherals while working with demanding, graphics intensive applications.

Multiple USB 3.0 and USB 2.0 ports are standard. There is an optional legacy connectivity module for serial, parallel, and PS/2 connections. Dual core Z users can choose between a regular or extended hardware form factor that offers connectivity to practically any Windows peripheral, the ultimate in versatility.

Using as little as 15 watts, the Z class is one cool, quiet operator and contributes to lowering your overall carbon footprint.

Z90S7 Office workers and knowledge workers will enjoy using the power of the Z90S7 to create and consume content.

Z90D7 Knowledge workers and power users will enjoy the dual core Z90D7's high performance for demanding Windows® virtual desktop and cloud applications, including rich content creation and consumption, HD video, unified communications, and 3D graphics.

Z90Q7 The quad core Z90Q7 delivers the best performance for power users who need even higher-end graphics, or graphics intensive workloads. The Z90Q7 offers the best performance for displaying, manipulating and work with stunning high definition, multimedia, 2D/3D graphics, HD video, computer aided design and modeling.

Don't forget the monitor!

Only Dell monitors are tested and verified to work with Dell Wyse clients. Click here to see which award winning Dell monitors are compatible with this client.

Z class connectivity here.

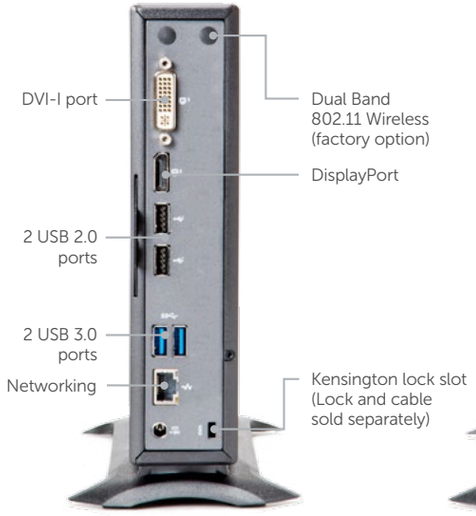
Z90DE7 connectivity here.

Product page

Z class Specifications

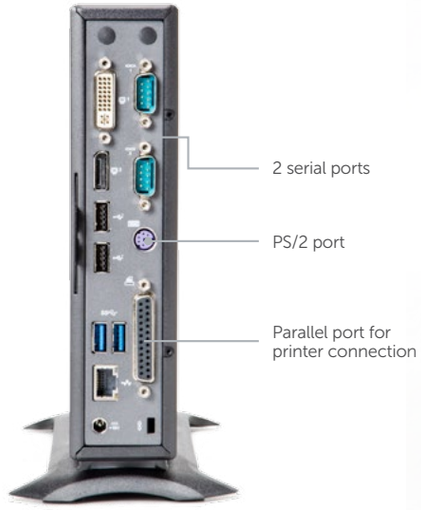
Z90DE7 Specifications

Dell Wyse Z class Connectivity (Z90S7, Z90D7(p), Z90Q7)

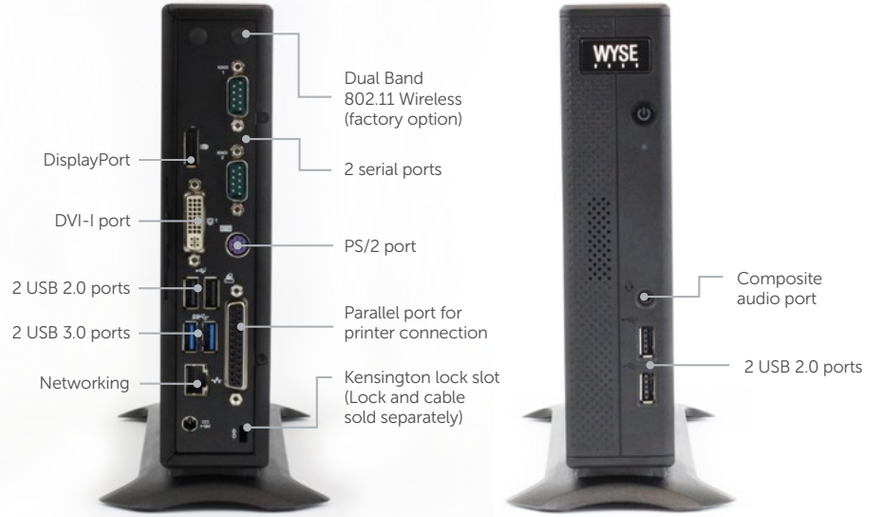


Z90S7 and Z90D7
Front view

Z90S7 and Z90D7
Rear view



Legacy connectivity option



Z90Q7. Shown with optional legacy connectivity

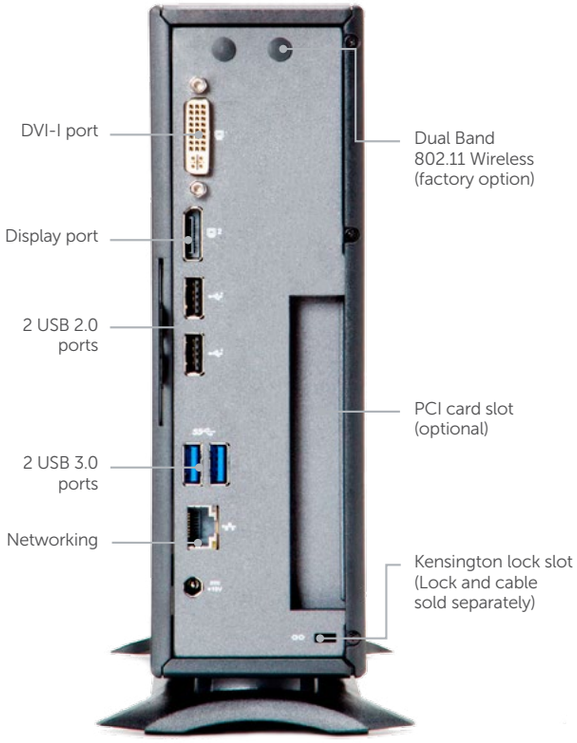
Product page

Z class Specifications

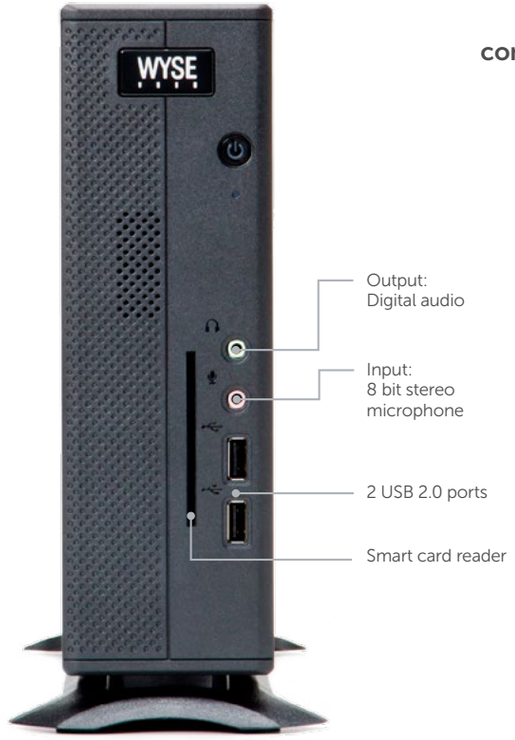
Dell Wyse Z class Connectivity (Z90DE7)

The Z90DE7, the most versatile Z class, offers maximum connectivity to practically any Windows peripheral device, including: bar code scanners, single-sign-on devices, and multi-factor authentication solutions - all offered by Dell Wyse partners.

In addition to the standard Z class connectivity, it includes an optional PCIe 2.0 slot. It also has an integrated smart card reader and supports up to eight displays.

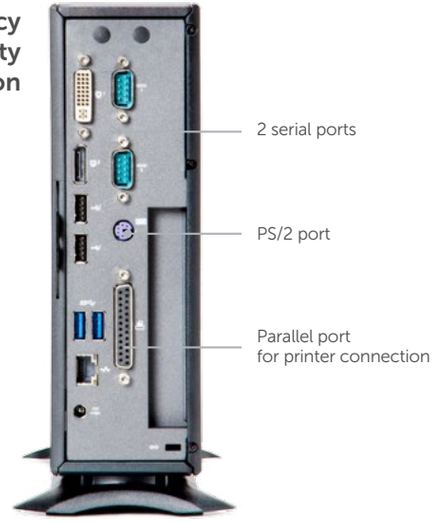


Z90DE7



Z90DE7

Legacy connectivity option



Product page

Z90DE7 Specifications

Dell Wyse X class thin clients Features

For today's demanding, mobile workforce.

Dell Wyse X class puts secure, high performance, mobile cloud computing into the hands of those users who need it most. Now you can get all of the security you crave – with all the access, flexibility and performance you need. Wherever you choose to work.

The Dell Wyse X90m7 features a crisp 14" LED backlit display and a dual core high performance APU - delivering excellent HD multimedia capabilities in a in a highly mobile form factor.

AMD G-Series T-56N Dual Core processor

The AMD Embedded G-Series platform is the world's first low power processor and advanced GPU that's integrated into a single embedded Accelerated Processing Unit (APU).

X90m7 connectivity.

Dell Wyse X90m7

Product page

Specifications

Dell Wyse X class thin clients Connectivity (X90m7)

Built-in WiFi 802.11 a/b/g/n

Kensington lock slot
Gigabit Ethernet port
One USB 2.0 port
Audio In: 1/8-inch mini jack, 8 bit stereo microphone
Audio Out: 1/8-inch mini jack, 16 bit stereo
Media card reader
Smart card reader (factory option)

Product page

Specifications

Dell Wyse Virtualization Software

A great user experience for both everyday and demanding workloads

Dell Wyse Windows Embedded Standard 7 thin clients offer an outstanding user experience out of the box. For users with demanding multimedia, performance, and remote access needs, Dell Wyse offers the following virtualization software packages.

Dell Wyse TCX Suite

Boost multimedia performance on Dell Wyse cloud clients without taxing your server resources.

Learn more here.

Dell Wyse Virtual Desktop Accelerator

Improve the experience for remote users with enhanced WAN performance.

Learn more here.

Windows® Embedded Standard 7 Specifications

Dell Wyse Device Management

Easy Central Management

With Dell Wyse or Microsoft management software, Dell Wyse Windows® Embedded Standard 7 thin clients can be managed in one place, regardless of where they are located. IT won't need to visit or touch endpoints. These solutions scale as you grow from just a few to tens of thousands of endpoints.

Manage with Dell Wyse Device Manager

An easy, secure, and highly scalable, central thin and zero client management solution, Dell Wyse Device Manager (WDM) can lower total cost of ownership of large deployments for your small organization or enterprise.

WDM features:

- Centralized, remote management for over 100,000 thin and zero clients
- Secure encrypted communications to every endpoint
- Policy-based configuration management, real-time asset management, automated firmware patches and updates, and health monitoring make managing cloud clients easy.

Learn more here.

Dell Wyse Configuration Manager

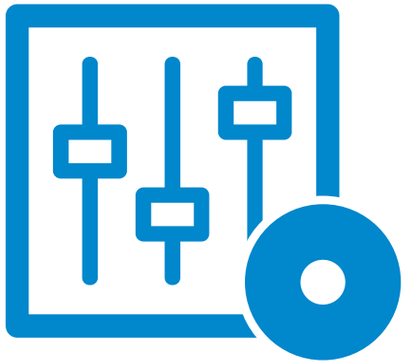
For installations without dedicated IT management teams, Dell Wyse Configuration Manager (WCM) enables thin clients to configure themselves for end users or as 'locked-down', single-purpose kiosks. Just select or create a configuration with the WCM GUI and your clients do the rest. No reimaging, rebooting, or touching required. WCM is free with all Windows Embedded Standard 7 thin clients.

Learn more here.

Manage with Microsoft® System Center Configuration Manager

Dell Wyse Windows® Embedded Standard 7 thin clients are fully integrated with Configuration Manager 2012 Service Pack 1 so you can continue using a single console for all of your networked devices and familiar configuration manager tools.

Learn more here.



Windows® Embedded Standard 7 Specifications

Windows® Embedded Standard 7 Specifications

Firmware features	Microsoft Windows® Embedded Standard 7 Microsoft Internet Explorer® 10 resident: HTML, JavaScript, XML Citrix Receiver 3.4 Microsoft RemoteFX® (RDP8) VMware Horizon View 5.3 Client Dell Quest vWorkspace 8 Ericom PowerTerm InterConnect Terminal Emulation Windows® Media Player
Server OS Infrastructure support	Citrix XenApp / Citrix Presentation Server Citrix XenDesktop VMware Horizon View Microsoft Windows® Remote Desktop Services 2003 & 2008 R2, 2012 Microsoft VDI
Security	BitLocker Drive Encryption (with WES 7p option) TPM hardware encryption supported (with WES 7p option) UEFI specifications supported Requires strong default password for the default user & administrator Windows® Firewall enabled by default Auto-run of (local) USB devices disabled by default
Set-up and configuration	Boot from local flash Microsoft Windows Embedded Standard 7 user interface languages: Many language options, including English, French and German
Keyboard language support	U.S. English (standard), French, German, Spanish, U.K. English, 40 other languages included
Protocol support	TCP/IP, DNS, DHCP, PXE
Management	Remote management, configuration, and upgrades through Dell Wyse Device Manager and Microsoft System Center Configuration Manager 2012 Service Pack 1 Configuration Management with Dell Wyse Configuration Manager (coming soon) Complete image upgrade

Wireless support	802.11 a/b/g/n support with dual band external wireless adapter or single band internal wireless adapter option WPA-2, WEP, WPA wireless authentication PEAP-GTC wireless authentication protocol with optional Juniper Odyssey Client Supports PC-Card wireless adapters* from: Cisco, D-Link, Netgear, US Robotics, Trendware
Plug-ins	Adobe Flash Player Microsoft Silverlight
Dell Wyse TCX Suite	Advanced support for innovative Dell Wyse TCX Suite virtualization software that both works with and enhances ICA and RDP (instead of replacing them) featuring: - Multimedia acceleration - the power to run rich multimedia files formats utilizing Dell Wyse Collaborative Processing Architecture (CPA) that intelligently redirects the necessary processing tasks between the thin client and the server. - Multi-display - ensures that windows and dialogue boxes behave the way users expect when using more than one monitor. - USB Virtualization - makes thin client-attached USB devices visible to virtual desktops and applications, with full IT control. - Bi-directional sound - enables virtual desktops and applications to receive and transmit high quality audio without compromise. - Flash acceleration - helps users of thin clients to experience improved Flash performance.
Dell Wyse Virtual Desktop Accelerator	Dell Wyse VDA works with instead of replacing existing RDP and ICA protocols, and is designed to offer significant acceleration over certain capacity-constrained WAN links.
	*Requires hardware support

Dell Wyse C class Hardware specifications

Processors	VIA Eden 1GHz
Memory	4GB Flash / 2GB RAM DDR2
Graphics	VIA VX855
Display	VESA monitor support with Display Data Control (DDC) for automatic setting of resolution and refresh rate DVI-I: 1920 x 1200 at 60Hz; color depth: 8, 15, 16, 24 or 32 bpp Dual display: 1920 x 1200 at 60Hz; color depth: 8, 15, 16, 24 or 32 bpp Supports dual high-resolution displays Dual monitors require optional monitor splitter cable (sold separately) Dual displays with the optional splitter cable provides 1 digital display and 1 analog display
Networking/Comm	10/100/1000 Base-T Gigabit Ethernet Optional Cisco CCX certified 802.11 b/g/n internal wireless (single antenna)
I/O peripheral support	One DVI-I port, DVI to VGA (DB-15) adapter included Dual-video support with optional DVI-I to DVI-D plus VGA-monitor splitter cable (sold separately) Four USB 2.0 ports (2 on front, 2 on back) Two PS/2 ports One Mic In / One Line Out
Audio	Output: 1/8-inch mini jack, full 16-bit stereo, 48KHz sample rate Input: 1/8-inch mini jack, 8-bit microphone
Included	Enhanced PS/2 Keyboard with Windows Keys (104 keys) PS/2 optical mouse Horizontal feet
Factory options	Internal wireless 802.11 b/g/n and dual-band n

Mountings	Horizontal feet, standard Optional vertical stand Optional VESA mounting bracket
Device security	Built-in Kensington security slot (cable sold separately)
Dimensions	Height: 1.38 inches (34 mm) Width: 6.94 inches (177 mm) Depth: 4.75 inches (121 mm) Weight: 1.34 lbs (610g)
Shipping weight	6 lbs. (2.7kg)*
Power	Worldwide auto-sensing 100-240 VAC, 50/60 Hz. Energy Star V.5.0 compliant power supply Power consumption Under 7 watts (average)
Temperature range	Horizontal position: 50° to 95° F (10° to 35° C) Vertical position, power button up: 50° to 104° F (10° to 40° C) Storage: 14° to 140° F (-10° to 60° C)
Humidity	20% to 80% condensing 10% to 95% non-condensing
Certifications	Ergonomics: German EKI-ITB 2000, ISO 9241-3/-8 Safety: cULus 60950, TÜV-GS, EN 60950 RF Interference: FCC Class B, CE, VCCI, C-Tick Environmental: WEEE, RoHS Compliant Energy Star®, EPEAT Silver listed
Warranty	Three-year Limited Hardware Warranty* Optional WyseChoice extensions and upgrades at http://www.wyse.com/warranties
	*See appendix for notes and guidance

C90LE7 Features

Dell Wyse D class Hardware specifications

Processors	D90D7: AMD G-Series T48E Dual Core 1.4GHz with integrated AMD Radeon™ HD 6250 graphics D90Q7: Quad core AMD G-Series SOC 1.5 GHz
Memory	D90D7:4GB Flash / 2GB RAM DDR3 D90Q7:16GB Flash / 2GB RAM DDR3 Maximum: 16GB Flash / 4GB DDR3 RAM & Optional SSD storage
Graphics	D90D7: AMD Radeon™ HD 6250 graphics (integrate with APU) D90Q7: AMD Radeon HD graphics (integrate with APU)
Display	VESA monitor support with Display Data Control (DDC) for automatic setting of resolution and refresh rate DisplayPort: 2560 x 1600 at 32bpp / DVI-I: 1920 x 1200 at 32bpp Dual display: 1920 x 1200 at 32bpp / Supports dual digital high-resolution displays
Networking/Comm	10/100/1000 Base-T Gigabit Ethernet Optional single and dual band 802.11 a/b/g/n integrated wireless with external dual antenna Optional RJ45 connector or SFP module support for Fiber NIC connectivity Optional Bluetooth connectivity
Security compliance	Security compliance: Security protocols supported for both wireless, and 802.1x network based authentication: EAP-TLS; EAP-LEAP; EAP-PEAP, EAP-MSCHAPv2, EAP-GTC; WEP; WPA Personal; WPA2 Personal; WPA Enterprise; WPA2 Enterprise
I/O peripheral support	One DisplayPort (optional DisplayPort to DVI-I adapter, sold separately) One DVI-I port. DVI to VGA (DB-15) adapter included Four external USB 2.0 ports (2 front, 2 back) Serial and parallel connectivity supported through USB 2.0 adapters Composite audio jack: 1/8-inch mini, 16-bit stereo D90Q7: Two SuperSpeed USB 3.0 ports on rear (backwards-compatible with USB 2.0)
Audio	Composite audio jack: 1/8-inch mini, 16-bit stereo / Internal mono speaker

Included	Enhanced USB keyboard with Windows keys (104 keys) and PS/2 mouse port PS/2 optical mouse / Vertical feet
Factory options	SSD storage Single and dual band 802.11 a/b/g/n integrated wireless with external dual antenna / RJ45 connector or SFP module support for Fiber NIC network connectivity / Bluetooth connectivity
Mountings	Vertical feet, standard Optional VESA mounting bracket for mounting to flat surfaces, such as walls Please note: D class clients cannot mount directly to the backs of monitors Optional Ergotron mounting stand for mounting with Dell monitors
Device security	Built-in Kensington security slot (cable sold separately)
Dimensions	Height: 6.7 inches (170 mm) / Width: 1.6 inches (40 mm) Depth: 7.3 inches (185 mm) / Weight: 2.05 lbs. / 0.93 kg
Power	Worldwide auto-sensing 100-240 VAC, 50/60 Hz 65W, 19V DC Energy Star V.5.2 Phase V external and EuP compliant power adapter
Power consumption	D90D7: Under 9 watts (average)
Temperature range	Operating, vertical position: 32° to 104° F (10° to 40° C) Storage: 14° to 140° F (-10° to 60° C)
Humidity	20% to 80% condensing / 10% to 95% non-condensing
Certifications	Ergonomics: German EKI-ITB 2000, ISO 9241-3/-8 Safety: cULus 60950, TÜV-GS, EN 60950 RF Interference: FCC Class B, CE, VCCI, C-Tick Environmental: WEEE, RoHS Compliant D90D7: Energy Star®, EPEAT Silver listed
Warranty	Three-year Limited Hardware Warranty* Optional WyseChoice extensions and upgrades at http://www.wyse.com/warranties

D class Features

Dell Wyse Z class Hardware specifications

Processors	Z90S7: Single core AMD G-T52R 1.5GHz Z90D7: Dual-core AMD G-T56N 1.65 GHz Z90Q7: Quad core AMD G-series SOC 2.0GHz
Memory	8GB Flash / 2GB DDR3 RAM (Maximum: 16GB Flash/ 8GB DDR3 RAM) Z90Q7: 4GB Flash / 2GB DDR3 RAM (Z90Q7: Maximum: 16GB Flash/ 4GB DDR3 RAM) Optional SSD storage also supported
Graphics	Z90S7: AMD Radeon™ HD 6310 graphics (integrated with APU) Z90D7: AMD Radeon™ HD 6320 graphics (integrated with APU) Z90Q7: AMD Radeon™ HD graphics (integrate with APU)
Display	VESA monitor support with Display Data Control (DDC) for automatic setting of resolution and refresh rate DisplayPort: 2560 x 1600 at 32bpp / DVI-I: 1920 x 1200 at 32bpp Dual display: 1920 x 1200 at 32bpp / Supports dual digital high-resolution displays
Audio	Networking/Comm
Networking/Comm	10/100/1000 Gigabit Ethernet Optional internal wireless 802.11 a/b/g and dual-band n / Optional Bluetooth connectivity
Security compliance	Security compliance: Security protocols supported for both wireless, and 802.1x network based authentication: EAP-TLS; EAP-LEAP; EAP-PEAP, EAP-MSCHAPv2, EAP-GTC; WEP; WPA Personal; WPA2 Personal; WPA Enterprise; WPA2 Enterprise Z90D7P: Optional Built-in TPM chip for security
I/O peripheral support	One DisplayPort (optional DisplayPort to DVI-D adapter, sold separately) One DVI-I port, DVI to VGA (DB-15) adapter included Four USB 2.0 ports (two front, two rear) Two SuperSpeed USB 3.0 ports on rear (backwards-compatible with USB 2.0) Optional legacy connectivity (adds 2 serial ports, 1 parallel port and 1 PS/2 port) One Mic In / One Line Out
Audio	Output: 1/8-inch mini jack, full 16-bit stereo, 48KHz sample rate; Digital audio out Input: 1/8-inch mini jack, 8-bit microphone / Internal mono speaker
Included	Enhanced USB keyboard with Windows Keys (104 keys) and PS/2 mouse port PS/2 optical mouse / Vertical feet

Factory options	SSD storage Internal wireless 802.11 a/b/g and dual-band n Bluetooth connectivity Legacy connectivity (adds 2 serial ports, 1 parallel port and 1 PS/2 port) Z90D7P: Built-in TPM chip for security
Mountings	Vertical feet, standard. Optional horizontal feet Optional VESA mounting bracket for mounting to flat surfaces, such as walls Please note: Z class clients cannot mount directly to the backs of monitors Optional Ergotron mounting stand for mounting with Dell monitors
Device security	Built-in Kensington security slot (cable sold separately)
Dimensions	Height: 7.87 inches (200 mm) / Width: 1.85 inches (47 mm) Depth: 8.85 inches (225 mm) / Weight: 2.42 lbs (1.1kg)
Shipping weight	6 lbs. (2.7kg)*
Power	Worldwide auto-sensing 100-240 VAC, 50/60 Hz Energy Star V.5.2 Phase V compliant power supply
Power consumption	Z90S7, Z90D7: Under 15 watts (average)
Temperature range	Horizontal position: 50° to 95° F (10° to 35° C) Vertical position, power button up: 50° to 104° F (10° to 40° C) Storage: 14° to 140° F (-10° to 60° C)
Humidity	20% to 80% condensing / 10% to 95% non-condensing
Certifications	Ergonomics: German EKI-ITB 2000, ISO 9241-3/-8 Safety: cULus 60950, TÜV-GS, EN 60950 RF Interference: FCC Class B, CE, VCCI, C-Tick Environmental: WEEE, RoHS Compliant Z90S7, Z90D7: Energy Star & EPEAT listed
Warranty	Three-year Limited Hardware Warranty* Optional WyseChoice extensions and upgrades at www.wyse.com/warranties.
	*See appendix for notes and guidance

Z class Features

Start | Introduction | Compare | Virtualization | Management | Specifications | Appendix | Contact

Dell Wyse Z class Hardware specifications for Z90DE7

Processors	Dual-core AMD G-T56N 1.65 GHz
Memory	8GB Flash / 2GB DDR3 RAM (Maximum: 16GB Flash / 8GB DDR3 RAM) Optional SSD storage also supported
Graphics	AMD Radeon™ HD 6320 graphics (integrated with APU)
Display	VESA monitor support with Display Data Control (DDC) for automatic setting of resolution and refresh rate DisplayPort: 2560 x 1600 at 32bpp / DVI-I: 1920 x 1200 at 32bpp Dual display: 1920 x 1200 at 32bpp / Supports dual digital high-resolution displays Expandable up to 8 displays via the PCIe expansion slot One PCIe 2.0 slot capable of accommodating up to x16 PCIe card Z90DE7P supports single and multi-touch displays
Audio	Networking/Comm
Networking/Comm	10/100/1000 Gigabit Ethernet Optional internal wireless 802.11 a/b/g and dual-band n / Optional Bluetooth connectivity
Security compliance	Security compliance: Security protocols supported for both wireless, and 802.1x network based authentication: EAP-TLS; EAP-LEAP; EAP-PEAP, EAP-MSCHAPv2, EAP-GTC; WEP; WPA Personal; WPA2 Personal; WPA Enterprise; WPA2 Enterprise Z90DE7P: Optional Built-in TPM chip for security
I/O peripheral support	One DisplayPort (optional DisplayPort to DVI-D adapter, sold separately) One DVI-I port, DVI to VGA (DB-15) adapter included Four USB 2.0 ports (two front, two rear) Two SuperSpeed USB 3.0 ports on rear (backwards-compatible with USB 2.0) Optional legacy connectivity (adds 2 serial ports, 1 parallel port and 1 PS/2 port) One Mic In / One Line Out Optional integrated smart card reader One PCIe 2.0 x4 with x16 slot, half card length, full height
Audio	Output: 1/8-inch mini jack, full 16-bit stereo, 48KHz sample rate; Digital audio out Input: 1/8-inch mini jack, 8-bit microphone / Internal mono speaker
Included	Enhanced USB keyboard with Windows Keys (104 keys) and PS/2 mouse port PS/2 optical mouse / Vertical feet

Factory options	SSD storage. Internal wireless 802.11 a/b/g and dual-band n Integrated smart card reader / Bluetooth connectivity Legacy connectivity - adds 2 serial ports, 1 parallel port and 1 PS/2 keyboard port Z90DE7P: Built-in TPM chip for security
Mountings	Vertical feet, standard. Optional horizontal feet Optional VESA mounting bracket for mounting to flat surfaces, such as walls Please note: Z class clients cannot mount directly to the backs of monitors Optional Ergotron mounting stand for mounting with Dell monitors
Device security	Built-in Kensington security slot (cable sold separately)
Dimensions	Height: 8.46 inches (215 mm) / Width: 2.72 inches (69 mm) Depth: 8.85 inches (225 mm) / Weight: 3.5 lbs. (1.59 kg)
Shipping weight	6 lbs. (2.7kg)*
Power	Worldwide auto-sensing 100-240 VAC, 50/60 Hz Energy Star V.5.2 Phase V compliant power supply
Power consumption	Under 15 watts (average)
Temperature range	Horizontal position: 50° to 95° F (10° to 35° C) Vertical position, power button up: 50° to 104° F (10° to 40° C) Storage: 14° to 140° F (-10° to 60° C)
Humidity	20% to 80% condensing / 10% to 95% non-condensing
Certifications	Ergonomics: German EKI-ITB 2000, ISO 9241-3/-8 Safety: cULus 60950, TÜV-GS, EN 60950 RF Interference: FCC Class B, CE, VCCI, C-Tick Environmental: WEEE, RoHS Compliant Z90S7, Z90D7: Energy Star & EPEAT listed
Warranty	Three-year Limited Hardware Warranty* Optional WyseChoice extensions and upgrades at www.wyse.com/warranties.
	*See appendix for notes and guidance

Z class Features

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Dell Wyse X class Hardware specifications for X90m7

Processors	Dual-core AMD G-T56N 1.65 GHz processor with AMD Radeon™ HD 6320 graphics
Memory	4GB Flash / 2GB RAM 1333 MHz DDR3 Maximum: 128GB Flash SSD / 4GB DDR3 RAM Optional SSD storage
Graphics	AMD Radeon™ HD 6320 (integrated with APU)
Display	14" WXGA 1366 x 768 LED backlight VGA port: 1366 x 768 at 32bpp DisplayPort: 2560 x 1600 at 32bpp
Networking/Comm	10/100/1000 Gigabit Ethernet Integrated wireless 802.11 a/b/g/n dual-band (2.4 GHz and 5GHz) Optional Bluetooth connectivity
Security compliance	Security compliance: Security protocols supported for both wireless, and 802.1x network based authentication: EAP-TLS; EAP-LEAP; EAP-PEAP, EAP-MSCHAPv2, EAP-GTC; WEP; WPA Personal; WPA2 Personal; WPA Enterprise; WPA2 Enterprise
I/O peripheral support	One VGA port One DisplayPort (optional DisplayPort to DVI adapter, sold separately) One USB 2.0 port Two USB 3.0 ports Media card reader Built-in 1.3 megapixel camera and microphone One Mic In / One Line Out Optional 3G/4G capable (PCIe slot available) Optional ExpressCard slot (factory installed) Optional integrated smart card reader (factory installed)
Audio	Output: 1/8-inch mini jack, full 16-bit stereo. Digital audio out Input: 1/8-inch mini jack, 8-bit microphone Two internal stereo speakers

Included	Pointing device: touchpad Keypad: US, US international, UK, French, German
Factory options	SSD storage 3G/4G capable (PCIe) ExpressCard slot Bluetooth connectivity Smart card reader
Device security	Built-in Kensington security slot (cable sold separately)
Dimensions	Width: 13.5 inches (341.6mm) Depth: 9.32 inches (239.2 mm) Height: 1.14 inches (28.9-35.5 mm) Weight: 3.8 lbs (1.72 kg); 4lbs (1.8 kgs) with battery
Shipping weight	Starting at 6.9lbs (3.2kg)*
Power	Worldwide auto-sensing 100-240 VAC, 50/60 Hz. Energy Star V.5.0 compliant power supply. 19V/65W AC adapter
Power consumption	Under 14 watts (average)
Temperature range	Horizontal position: 50° to 104° F (10° to 40° C) Storage: 14° to 140° F (-10° to 60° C)
Humidity	20% to 80% condensing / 10% to 95% non-condensing
Certifications	Safety: UL/IEC 60950-1, TUV EMC: CE (EN 55022, EN 55024), FCC 15B) Wireless: FCC (Part 15C), CE (EN 300 328, EN 301 489), Directive 1999/5/EC Environment: RoHS, WEEE
Warranty	One-year Limited Hardware Warranty* / Six-month battery warranty. Optional WyseChoice extensions and upgrades at www.wyse.com/warranties.
	*See appendix for notes and guidance

X class Features

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Appendix

Dell Wyse Windows® Embedded Standard 7 thin clients

Combine the performance, reliability and flexibility of Windows® Embedded Standard 7 with the security, ease of management, and cost-savings of thin clients for secure VDI with a fast, rich, familiar Windows 7 users experience.

*Product weights

Product weights stated may vary depending on configuration and manufacturing variability.

*Limited Hardware Warranty

For copy of Ltd Hardware Warranty, write Dell USA LP, Attn: Warranties, One Dell Way, Round Rock, TX 78682 or see dell.com/warranty.

Key facts about Dell Wyse Windows® Embedded Standard 7 thin clients

- **Secure:** have a much smaller attack surface than PCs
- **Versatile:** offer fast, flexible connectivity to a broad range of Windows® applications and peripherals
- **Easy to manage:** with Dell Wyse Device Manager or Microsoft System Center Configuration Manager
- **Ultra-reliable:** with no moving parts
- **Extremely energy efficient:** operate with fewer than 25 watts of electricity

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Dell cloud client computing
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Final approved 170913.